Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for emulating multiple logical ports on a physical port of a data processing system, the method comprising:

providing a subnet management queue pair for a physical port;

providing a plurality of logical ports, wherein packets intended for the plurality of logical ports are received at the physical port; and

providing an aliased subnet manager queue pair for each of the plurality of logical ports.

2. (Original) The method of claim 1, further comprising:

receiving a packet at the physical port; and

responsive to the packet being intended for a given logical port, looping the packet back to the given logical port.

3. (Currently Amended) The method of claim 1, further comprising:

sending a packet from an aliased subnet manager queue pair, wherein said aliased queue pair comprises a queue pair zero; and

responsive to the packet being intended for a given logical port, looping the packet back to the subnet management queue pair for the physical port.

4. (Original) The method of claim 3, further comprising:

responsive to the packet being intended for an external port, routing the packet to the physical port.

5. (Original) The method of claim 1, further comprising:

providing a logical switch for the physical port.

6. (Original) The method of claim 1, wherein each aliased subnet manager queue pair is associated with a logical partition.

7. (Original) The method of claim 1, further comprising:

providing a hypervisor subnet management agent, wherein the hypervisor subnet management agent routes traffic for the plurality of logical ports.

8. (Original) The method of claim 7, wherein the hypervisor subnet management agent transmits response packets on behalf of the plurality of logical ports.

9. (Original) The method of claim 1, wherein each subnet management queue pair is an InfiniBand queue pair zero.

10. (Currently Amended) An apparatus for emulating multiple logical ports on a single physical port of a data processing system, the apparatus comprising:

a subnet management queue pair for a physical port;

a plurality of logical ports, wherein packets intended for each of the plurality of logical ports are received only at the single physical port; and

an aliased subnet manager queue pair for each of the plurality of logical ports.

11. (Original) The apparatus of claim 10, further comprising:

a hypervisor subnet management agent, wherein the hypervisor subnet management agent routes traffic for the plurality of logical ports.

12. (Original) The apparatus of claim 11, wherein the hypervisor subnet management agent receives a packet at the physical port and, responsive to the packet being intended for a given logical port, loops the packet back to the given logical port.

13. (Original) The apparatus of claim 11, wherein the hypervisor subnet management agent transmits response packets on behalf of the plurality of logical ports.

14. (Original) The apparatus of claim 10, further comprising:

a logical switch associated with the physical port.

15. (Original) The apparatus of claim 14, wherein an aliased subnet manager queue pair sends a packet and wherein the logical switch, responsive to the packet being intended for a given logical port, loops the packet back to the subnet management queue pair for the physical port.

16. (Original) The apparatus of claim 15, wherein the logical switch, responsive to the packet being intended for an external port, routes the packet to the physical port.

17. (Original) The apparatus of claim 10, wherein each aliased subnet manager queue pair is associated with a logical partition.

18. (Original) The apparatus of claim 10, wherein each subnet management queue pair is an InfiniBand queue pair zero.

19. (Currently Amended) A host channel adapter comprising:

one or more physical ports of a data processing system;

a queue pair zero for each physical port, wherein packets received at a physical port are placed in a corresponding queue pair zero;

a plurality of logical host channel adapters, wherein each logical host channel adapter is associated with a logical partition, wherein each logical host channel adapter has at least one logical port, and wherein each logical port has an associated aliased queue pair zero and an associated physical port;

a hypervisor subnet management agent, wherein the hypervisor subnet management agent receives packets at a queue pair zero for a physical port, transmits response packets on behalf of the logical ports, and routes the packets to the intended logical ports, wherein a logical port can receive a packet only from its associated physical port.

20. (Original) The host channel adapter of claim 19, further comprising:

a logical switch associated with a given physical port, wherein the logical switch receives a packet from an aliased queue pair zero and, responsive to the packet being intended for a given logical port, loops the packet back to a queue pair zero for a physical port.